

Elden Street and Center Street Intersection Improvements

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Existing Conditions

- Existing un-signalized skewed intersection
- Two way stop on Center Street
- Left turn lane blocks thru traffic on Elden Street
- Sight Distance Issues
 - Ex. vegetation (trees), structures and parking
 - Left turns from Elden:
 - Opposed left turning vehicles block view of oncoming traffic
 - Vehicles swerve around opposed left turning vehicles
- Heavy school bus traffic and Fairfax Connector buses travel through the intersection daily
- Average of six reported accidents per year within the intersection have occurred between 2009 and 2014



Existing Conditions (cont.)

- Decision to keep/remove Grace St traffic signal
 - Traffic signal installed in 1992
 - Provides safe access for children to Herndon Middle School



Existing Conditions (cont.)

- Existing trees at the Northeast and Northwest corners of the intersection



Existing Conditions (cont.)

- Inspection of trees completed by
 - John Dudzinsky, Community Forester
 - Ron Rubin , International Society of Arboriculture, Certified Arborist, & Owner of Thrives Landscaping
- Recommendations for both trees if saving:
 - Prune roots prior to construction
 - Minimize construction around the base of the tree(s)



Background

- Concept for a signalized intersection began in 1988 with the Historic Herndon Downtown Streetscape Project
- Grace Street traffic signal installed in 1992 for Herndon Middle School
- Elden/Center intersection was revisited in 2000 through 2005 with Herndon Harbor House & Fortnightly Development
- Intersection improvement project introduced in the year 2000 CIP

Historic Herndon

Downtown Master Plan

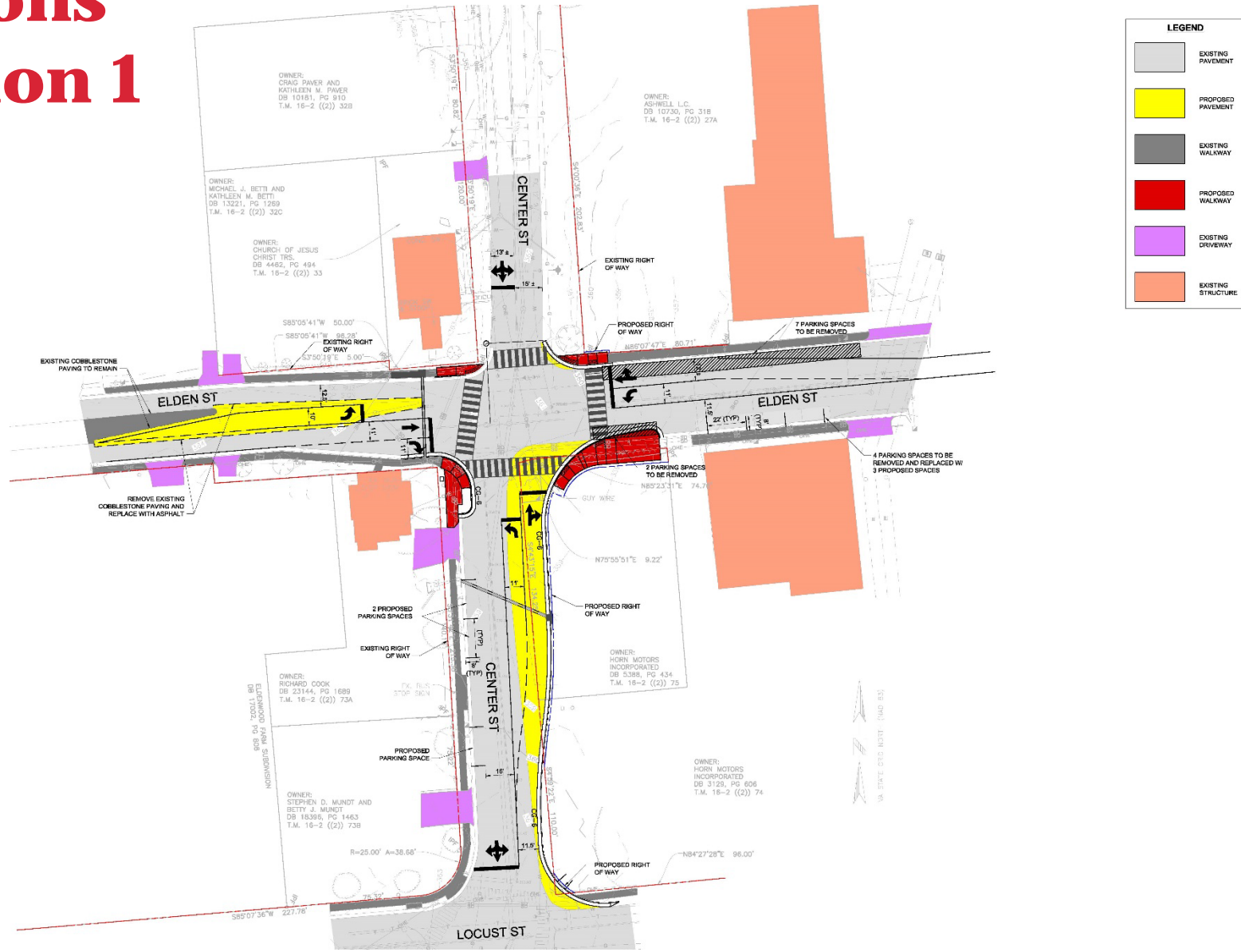
- Downtown Master Plan developed in 2011 for a vision of the comprehensive development for downtown
- Elden/Center Street intersection is the gateway from the West into Downtown
- Tighten vehicle turning radii
- Balance pedestrian, bike, transit and vehicular movements
- Create a more walkable downtown while maintaining safe traffic
- Create centralized parking area (underground/above ground structure) at the intersection of Center/Vine Streets for Downtown
- Master Plan calls for “circulation and access throughout the downtown, and enhancing the viability of future retail”

Proposed Improvements

- Signalization of the intersection
 - Installation of a traffic signal at the intersection of Center/Elden Street was proposed by Fortnightly Traffic Impact Analysis, by Gorove/Slade Associates, Inc. (2001 & 2005).
 - Expected to move some vehicular traffic from Grace Street
 - Accommodate downtown development
- Streetscape improvements, brick sidewalk, curb and gutter
- Pedestrian and bicycle accessibility (curb ramps, sidewalks)
- Storm drain improvements
- Vehicle sight distance improvements
 - Provides left turn lanes
 - Side streets signalized

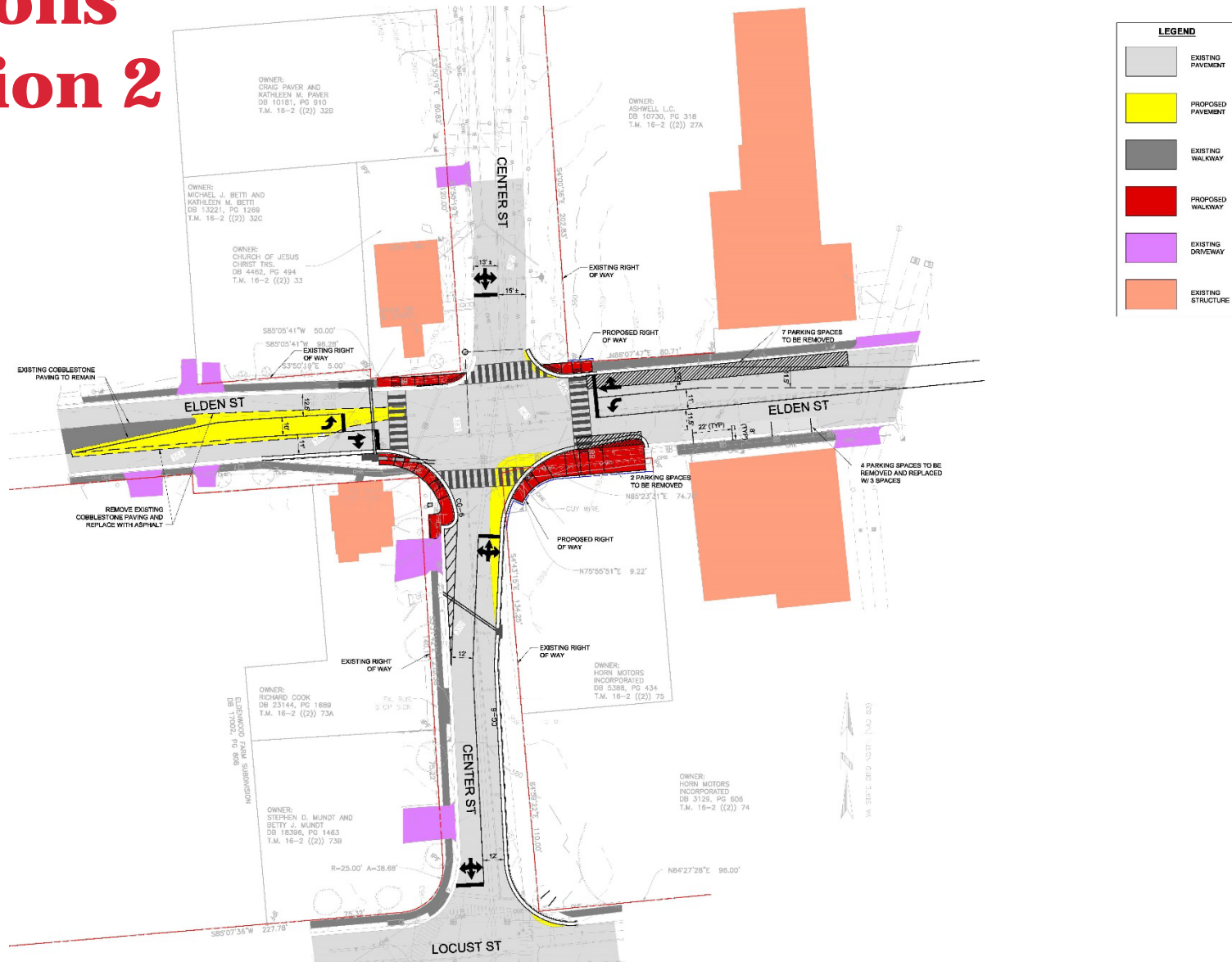
Solutions

Option 1



Solutions

Option 2



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Options Comparison

	Option 1	Option 2	Option 3
Vehicle Movements			
Turning radius preserves existing tree at northeast corner of the intersection	X	X	
Loss of existing tree at northeast corner			X
No southbound right turn lane from eastbound Elden St to southbound Center St		X	
Curb return radius at the southeast corner of the intersection – 22 ft radius. Moves stop bar back and reduces left hand turn lane storage on westbound Elden St			X
Curb return radius at the southwest corner of the intersection – 20 ft	X		X
Parking			
Net loss of seven parking spaces	X		X
Net loss of ten parking spaces		X	
Pedestrian Movement			
Shortest distance across Elden St		X	
Shortest distance across Center St			X
Right-of-Way Dedication			
Smallest ROW dedication required		X	

Schedule

- Town Council Work Session May 2015
- Public Input Meeting July 2015
- Town Council Adopt Concept Plan Fall 2015
- Complete Construction Plans Summer 2016
- Complete Right-of-Way Acquisition Winter 2017
- Removal of Temporary Fire Station mid-2016
- Begin Construction Spring 2017

Questions?

